PiAcademy

11+ Mathematics
GL Style – Pack 1
Test Paper - 2

Instructions:

1. The time allowed is 50 minutes for 50 questions.
2. This is a multiple-choice test and each question carries 1 Mark.
3. Answers should be clearly marked in pencil on the provided answer sheet.
4. Do not turn over the booklet until you are told to do so.
5. No Marks are lost for an incorrect answer.
6. If you have marked the wrong answer, erase it and mark the new one. Make sure that your final answer is clear.

Symbols used:

Go to the next page.

Do not turn the page until told to do so.

Stop working and await instructions.

1 . Find the missing digits?

$$\begin{array}{r} 3\ 5 \\ \times\ \square \\ \hline 2\ 1\ 0 \end{array}$$

(A) 7 (B) 8 (C) 6 (D) 9 (E) 4

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2. A garage sells cars. It offers a discount of 25% off the normal price for cash. Dave pays £4500 cash for a car. Calculate the normal price of the car

(A) £5000 (B) £6000 (C) £7000 (D) £6500 (E) £5500

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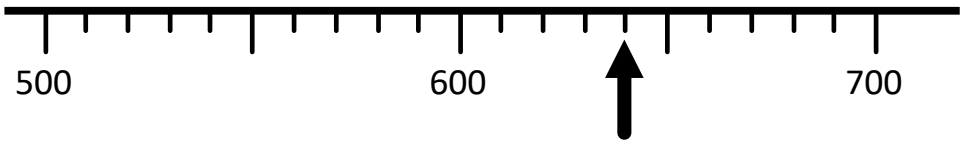
3. Write down the number marked by the arrow on the number line below.



(A) 605 (B) 650 (C) 630 (D) 640 (E) 645

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4. What is the difference between the product of 5 and 14 and the difference of 5 and 14?

(A) 71 (B) 79 (C) 69 (D) 73 (E) 61

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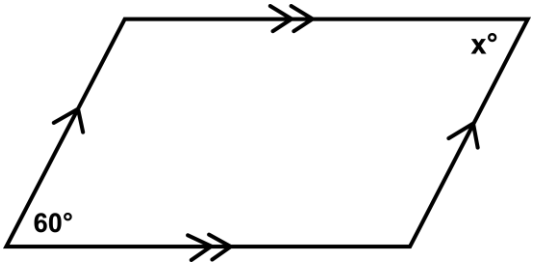
5. Look at the parallelogram below. Write down the value of x.



(A) 120° (B) 70° (C) 60° (D) 90° (E) 100°

6. Put brackets into the following sum to make them correct.

$5 \times 4 + 5 \div 5 = 5$

(A) $(5 \times 4) + 5 \div 5 = 5$
(B) $5 \times (4 + 5) \div 5 = 5$
(C) $(5 \times 4 + 5) \div 5 = 5$
(D) $5 \times 4 + (5 \div 5) = 5$
(E) $5 \times (4 + 5 \div 5) = 5$

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7. Calculate the following, giving the answer as a mixed number in its simplest form

$$\mathbf{5\ \frac{1}{6}\ -\ 3\ \frac{1}{3}}$$

(A) $\frac{11}{6}$ (B) $1\frac{3}{6}$ (C) $1\frac{5}{6}$ (D) $2\frac{4}{6}$ (E) $1\frac{1}{6}$

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8. Here are the ingredients needed to make 16 gingerbread.

160g flour
80g ginger
90g butter
70g sugar

Dexter wants to make 24 gingerbread. Work out how much of sugar he needs?

(A) 105g (B) 140g (C) 100g (D) 90g (E) 125g

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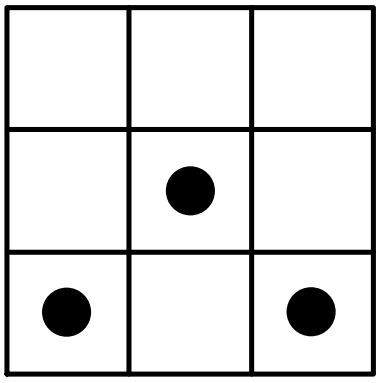
9. One more dot is placed at random in one of the empty squares on the grid.

What is the probability that it will complete a line of three dots?



(A) $\frac{1}{3}$ (B) $\frac{1}{2}$ (C) $\frac{2}{3}$ (D) $\frac{4}{6}$ (E) $\frac{3}{9}$

10. What is this number to two decimal places?

4.2789854

(A) 4.27 (B) 4.28 (C) 4.30 (D) 4.25 (E) 4.20

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11. Yana started at 5 and counted up in steps of $1\frac{3}{4}$. Which of these numbers did she count?

(A) 8 (B) 12 (C) 10 (D) 9 (E) 14

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12. A sequence starts at 500 and 80 is subtracted each time.

500 420 340 ...

The sequence continues in the same way.
Which is the first number in the sequence that is less than zero?

(A) – 20 (B) – 30 (C) – 50 (D) – 60 (E) – 40

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13. Bus A arrives every 9 minutes. Bus B arrives every 15 minutes. Both buses arrive at 10:30. When do they next both arrive at the same time?

(A) 11:00 (B) 12:15 (C) 13:45 (D) 11:15 (E) 12:00

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14. Write the three prime numbers which multiply to make 231.

(A) 3, 7, 13 (B) 5, 7, 11 (C) 2, 3, 7 (D) 7, 11, 13 (E) 11, 7, 3

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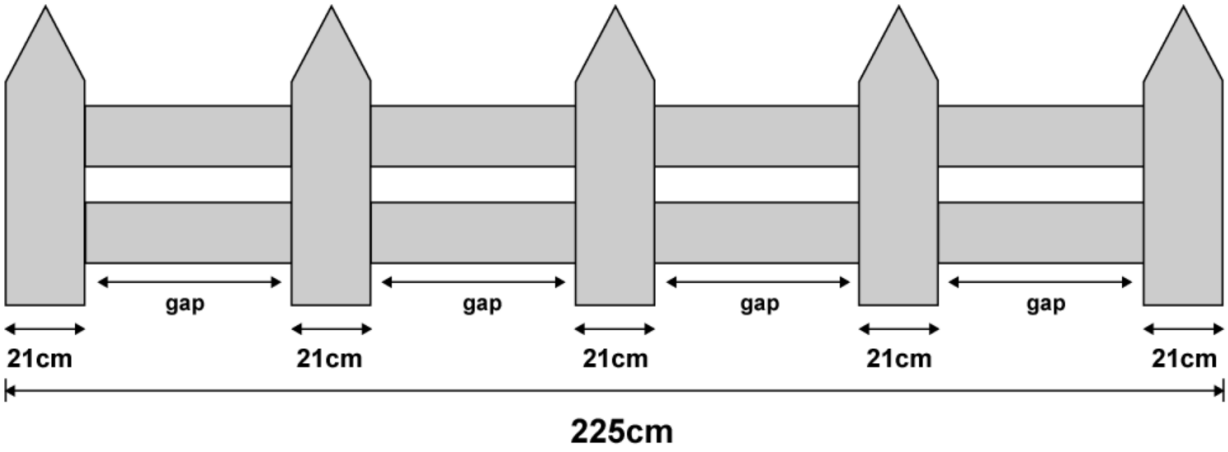
15. I'm thinking of a two digit number that is a multiple of both six and twelve.
The digits add up to nine.
What number am I thinking of?

(A) 54 (B) 36 (C) 81 (D) 90 (E) 48

16. This fence has five posts, equally spaced.



Each post is 21cm wide. The length of the fence is 225cm.
Calculate the length of one gap between two posts.

(A) 30cm (B) 45cm (C) 50cm (D) 28cm (E) 48cm

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17. Which of these five letters have exactly two lines of symmetry?

(A) K (B) T (C) L (D) E (E) X

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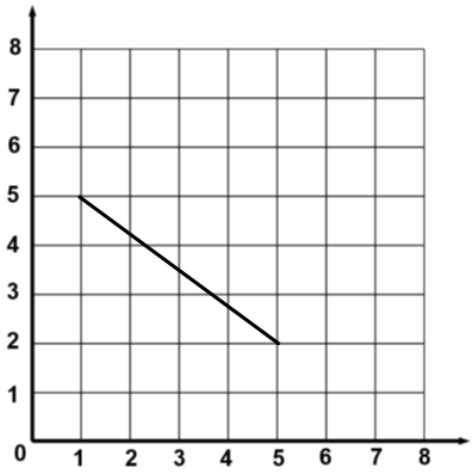
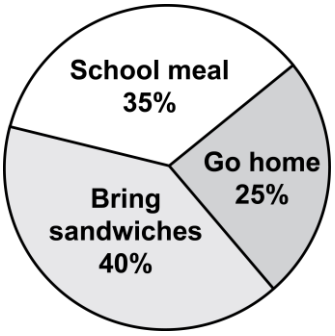
18. The endpoints of five lines are shown below.
Which line is parallel to the line in the diagram?



(A) (6, 3) and (3, 6)
(B) (7, 2) and (2, 8)
(C) (3, 5) and (5, 4)
(D) (0, 4) and (4, 1)
(E) (5, 6) and (6, 7)

19. This pie chart shows the lunch choices of year 6 children at a school.



70 children in year 6 have a school meal.
How many go home for lunch?

(A) 40 (B) 50 (C) 60 (D) 25 (E) 30

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20. Max jumped 2.25m on his second try at the long jump.
This was 75cm more than on his first try.
How far in metres did he jump on his first try?

(A) 150cm (B) 1.6m (C) 2m (D) 1.4m (E) 1.5m

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21. A packet contains 2.4kg of Cat food.
Rita feeds her cat 150g of food each day.

How many days does the packet of food last?

(A) 15 days (B) 16 days (C) 18 days (D) 20 days (E) 17 days

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22. The temperatures were:

Inside	Outside
– 1°C	– 8°C

What is the difference between these two temperatures?

(A) 7°C (B) – 9°C (C) – 10°C (D) 8°C (E) – 6°C

23. The sum of the first three cube numbers is 36. What is the sum of the first five cube numbers?

(A) 100 (B) 200 (C) 315 (D) 225 (E) 175

---

24. A box contains 260 matches and weighs 29 grams.
The empty box weighs 16 grams.
Calculate the weight of one match.

(A) 0.005g (B) 50mg (C) 5g (D) 0.05mg (E) 50g

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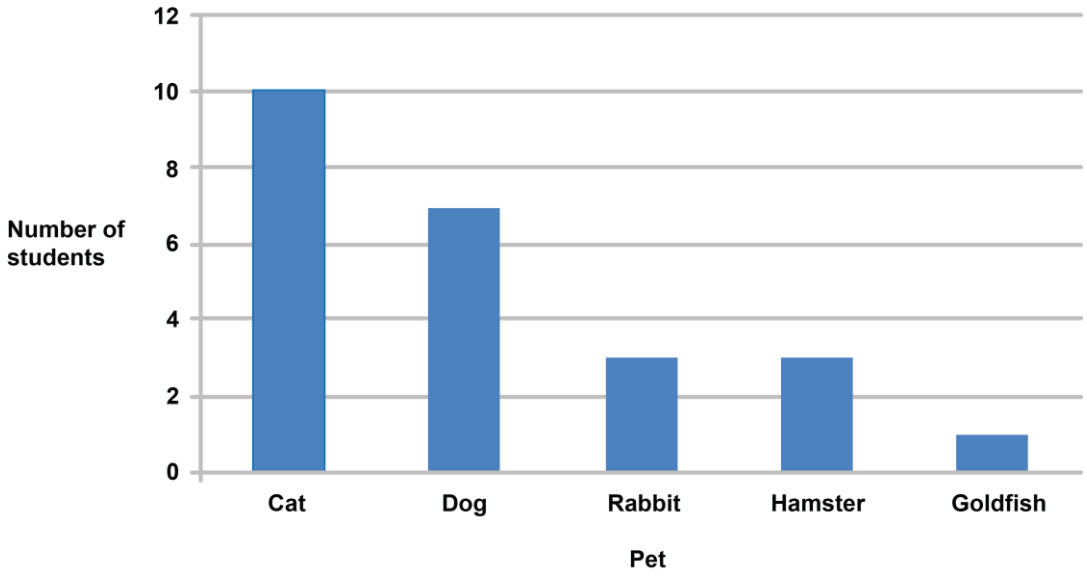
25. Alex asked some students to tell him their favourite pet.
He used the information to draw this bar chart.



Work out how many students Alex asked.

(A) 10 (B) 23 (C) 15 (D) 24 (E) 17

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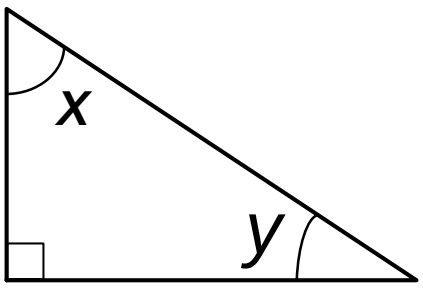
26. Look at the triangle. Angle x is 55°.
Calculate the size of angle y.



(A) 55° (B) 60° (C) 45° (D) 30° (E) 35°

27. If it is given that

$351 \times 58 = 20358$

find the value of $203.58 \div 5.8$?

(A) 35.1 (B) 351 (C) 3.51 (D) 35100 (E) 3510

---

28. Emily, Ben and Nisha collect money for charity.
Emily collects £2.75 more than Nisha.
Ben collects £15.
Nisha collects £7 less than Ben.

Altogether how much money do the three children collect?

(A) £34.25 (B) £33.75 (C) £35.25 (D) £34 (E) £35

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29. It is expected that 1 in 4 people are left-handed.
There are 840,000 people in a town.
How many people in the town would you expect to be left-handed?

(A) 16000 (B) 160000 (C) 240000 (D) 210000 (E) 24000

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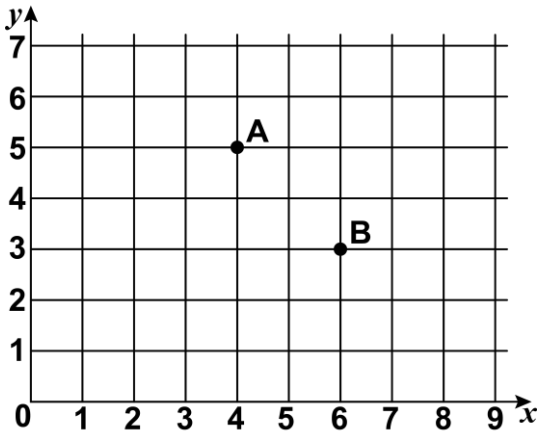
30. A, B, C and D are the vertices of a rectangle.
A and B are shown on the grid



D is the point (3, 4). Write the coordinates of point C.

(A) (7, 6) (B) (2, 4) (C) (5, 2) (D) (4, 6) (E) (2, 6)

31. The table shows Mr John's journey time to work each day in one week.

Day	Start time	End time
Monday	8:40 am	9:10 am
Tuesday	8:30 am	9:05 am
Wednesday	8:55 am	9:20 am
Thursday	8:50 am	9:25 am
Friday	8:30 am	8:55 am

What was his mean average journey time?

(A) 30 minutes (B) 1 hour
(C) 40 minutes (D) 35 minutes
(E) 25 minutes

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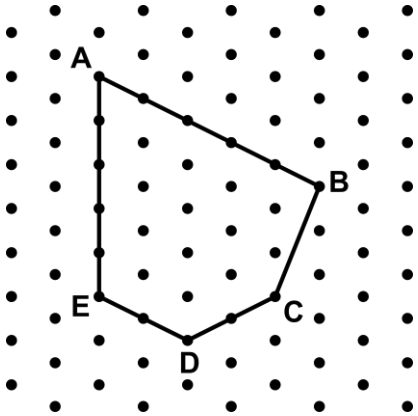
32. This shape is drawn on triangle dotty paper.



One of the angles is 60°. Which one is it?

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33. How long will it take a snail to move 3 meters at 5 mm/s

(A) 60 seconds (B) 6 minutes
(C) 60 minutes (D) 10 minutes
(E) 6000 seconds

---

34. A cuboidal tank is 4m long and 3m wide. It has a capacity of $72m^3$. What is the height of the tank?

(A) 12m (B) 6m (C) 18m (D) 10m (E) 5m

35. If I buy 30 litres of petrol at 65p per litre. How much change will I get from £50?

(A) £31.50 (B) £20.50 (C) £20.55 (D) £31.00 (E) £30.50

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36. Which weighs about 1 kg?

(A) A football
(B) A Volleyball
(C) A badminton racket
(D) A cricket bat
(E) A tennis ball

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37. What is the smallest number that is exactly divisible by 2, 3 and 6?

(A) 12 (B) 18 (C) 30 (D) 9 (E) 6

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38. Large cans of soda hold 300ml and small cans hold 160 ml. On Monday Karen drank two small cans and one large can. On Tuesday she drank two large cans and on Wednesday she drank two small cans. Her friend Lucy drank exactly three-quarters of the amount that Karen drank in total. How much did Lucy drink?

(A) 1200 (B) 900 (C) 1155 (D) 1250 (E) 1500

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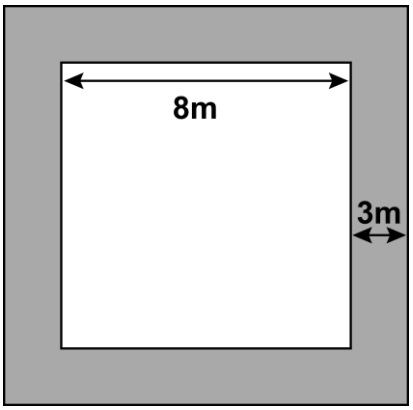
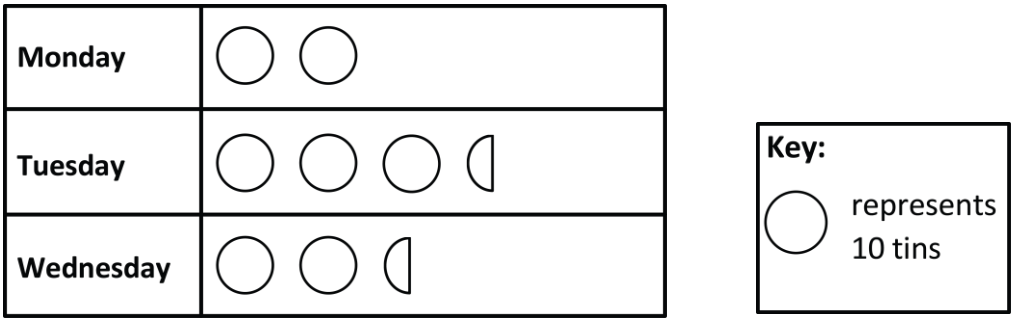
39. The figure shows an 8-metre by 8-metre park surrounded by a path 3 metres wide.

What is the difference between the outer perimeter and the inner perimeter of the path?



(A) 24m (B) 32m (C) 12m (D) 56m (E) 16m

40. The pictogram shows the number of tins of cat food sold in a shop on Monday, Tuesday and Wednesday of a week last year.



How many more tins were sold on Tuesday than on Wednesday?

(A) 5 (B) 15 (C) 20 (D) 10 (E) 7

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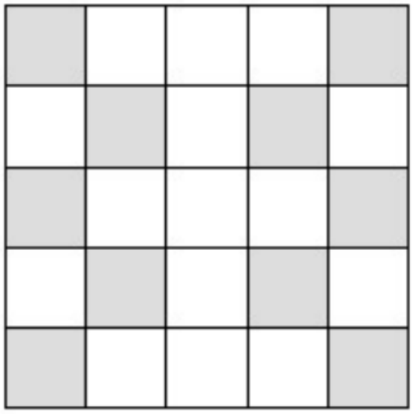
41. Here is a pattern on a grid.

What fraction of the grid is shaded?



(A) $\frac{2}{3}$ (B) $\frac{10}{20}$ (C) $\frac{5}{7}$ (D) $\frac{2}{5}$ (E) $\frac{3}{5}$

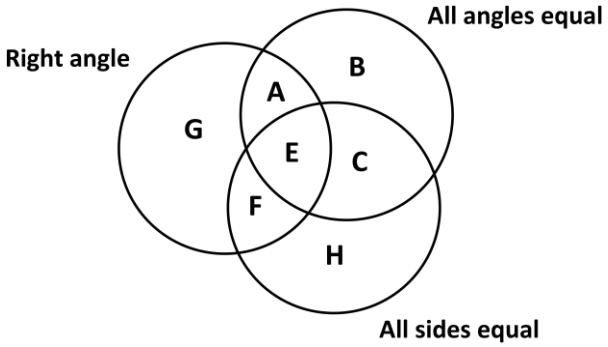
---

42. If 29th March is Friday. What will be the day on April 30th?

(A) Tuesday
(B) Friday
(C) Monday
(D) Sunday
(E) Saturday

43. Look at the Venn diagram.

Which of the following regions can have a rectangle in it?



(A) D (B) E (C) A (D) C (E) H

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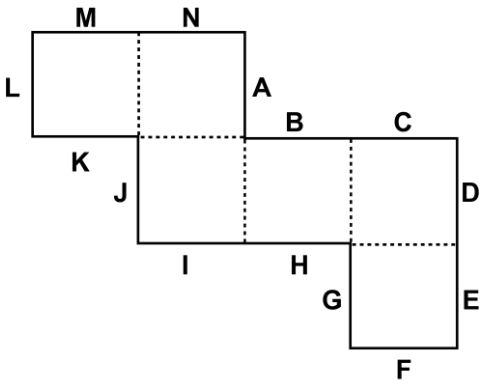
44. When the net is folded up to form a cube, which side will touch side C?



(A) B (B) A (C) K (D) I (E) N

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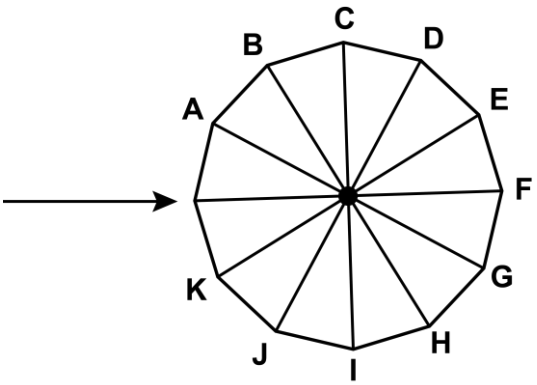
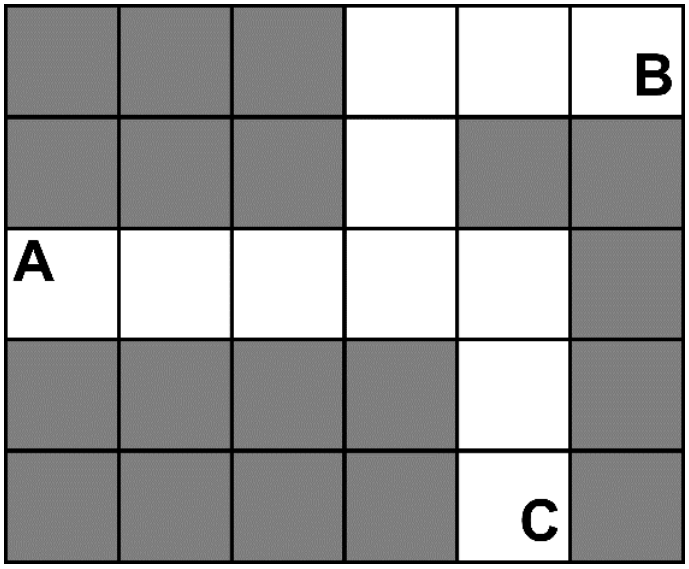
45. The dodecagon is divided into 12 equal sectors. It is rotated 210° clockwise about its centre. Which point on the circle will the arrow point to?



(A) A (B) D (C) B (D) E (E) F

46. Martin wants to go to point B from point A in the given maze. He can only MOVE FORWARD, TURN RIGHT 90° and TURN LEFT 90°.



Guide Martin by giving him the instructions that will help him reach point B?

(A) MOVE FORWARD 4, TURN LEFT 90°, MOVE FORWARD 3, TURN RIGHT 90°, MOVE FORWARD 3

(B) MOVE FORWARD 3, TURN LEFT 90°, MOVE FORWARD 2, TURN RIGHT 90°, MOVE FORWARD 2

(C) MOVE FORWARD 3, TURN RIGHT 90°, MOVE FORWARD 3, TURN LEFT 90°, MOVE FORWARD 2

(D) MOVE FORWARD 4, TURN RIGHT 90°, MOVE FORWARD 3

(E) MOVE FORWARD 4, TURN RIGHT 90°, MOVE FORWARD 2

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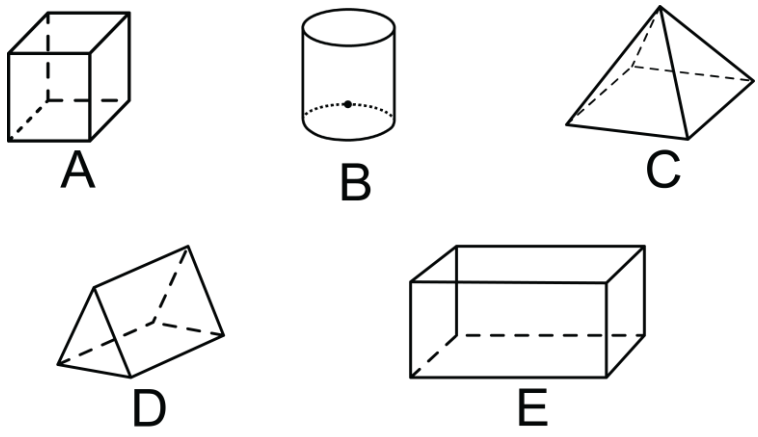
47. The pointer turns anti-clockwise from North to Southwest. What angle does it turn through?

(A) 225° (B) 270° (C) 135° (D) 315° (E) 90°

48. Look at the diagrams showing 3-D shapes. Which of these shapes has one square face and four triangular faces?



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49. This machine divides by 4 and then adds 5 to the result.

Which number comes out?

(A) 35 (B) 36 (C) 26 (D) 31 (E) 25

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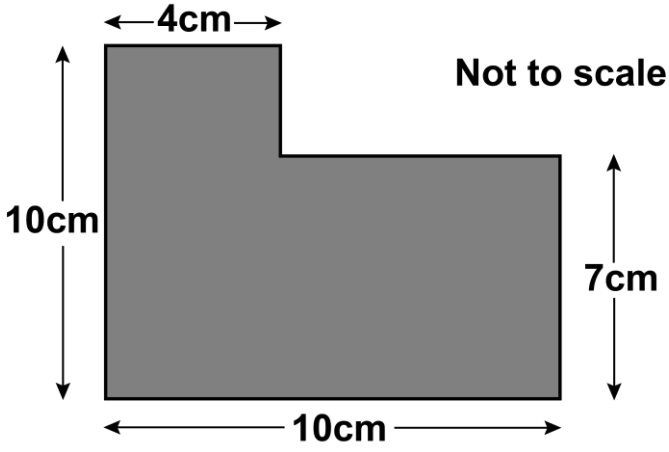
50. What is the area of this shape?



(A) 72cm^2 (B) 62cm^2 (C) 78cm^2 (D) 90cm^2 (E) 82cm^2

11+ Maths - GL Style (Pack 1) - Test Paper 2
ANSWER MARKING SHEET

Name:

Date:

School Name:

Please mark boxes with a thin horizontal line like this - ▬ .

1 A B C D E	2 A B C D E	3 A B C D E	4 A B C D E	5 A B C D E	6 A B C D E	7 A B C D E	8 A B C D E	9 A B C D E	10 A B C D E
11 A B C D E	12 A B C D E	13 A B C D E	14 A B C D E	15 A B C D E	16 A B C D E	17 A B C D E	18 A B C D E	19 A B C D E	20 A B C D E
21 A B C D E	22 A B C D E	23 A B C D E	24 A B C D E	25 A B C D E	26 A B C D E	27 A B C D E	28 A B C D E	29 A B C D E	30 A B C D E
31 A B C D E	32 A B C D E	33 A B C D E	34 A B C D E	35 A B C D E	36 A B C D E	37 A B C D E	38 A B C D E	39 A B C D E	40 A B C D E
41 A B C D E	42 A B C D E	43 A B C D E	44 A B C D E	45 A B C D E	46 A B C D E	47 A B C D E	48 A B C D E	49 A B C D E	50 A B C D E

For Parents use only

Marks Scored: ---------- **Time taken:** ----------

Comments: ----------

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